

### Give me 5 Division Focus

55 divided by 5 =

Share 42 into 7 groups.

Group 54 into 9s.

486 divided by 2 =

What numbers can fit perfectly into 24?

## Give me 5 Division Focus

55 divided by 5 = 11

Share 42 into 7 groups. 6

Group 54 into 9s. 5

486 divided by 2 = 243

What numbers can fit perfectly into 24? 1, 24, 3, 8, 4, 6, 2, 12

## Drawing and Reading Line Graphs

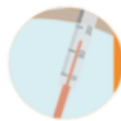
### Lesson 4

#### In Focus

A glass of water was left in a freezer.  
Its temperature was taken every 10 minutes.



start of experiment   10 min   20 min   30 min   40 min   50 min   60 min



Can we draw a line graph for this data? How do you know?

How would you organise the information before drawing the graph?

## Drawing and Reading Line Graphs

4

### In Focus

A glass of water was left in a freezer.  
Its temperature was taken every 10 minutes.



start of experiment   10 min   20 min   30 min   40 min   50 min   60 min



Let's put this information in a line graph:  
What information would you put in the columns?

What time would you assign to the start of the experiment and why?

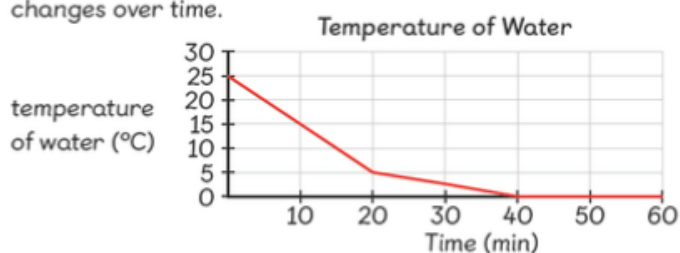
Now we have organised our information, what do we do next? How should we label the axes?

**Let's Learn**

- 1 Complete the table.

Time (min)	0	10	20	30	40	50	60
Temperature (°C)	25	15	5	3	0	0	0

- 2 Draw a line graph to show how the temperature of the glass of water changes over time.



Did the temperature increase, decrease or remain the same?



What trends are clear from the data?

Is it as you would expect? Why or why not?

What was the approximate temperature of the water after 15 minutes?

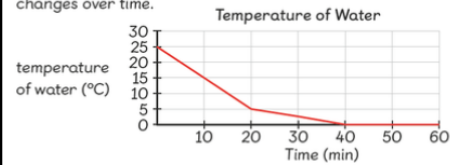
After how many minutes was the temperature at 20 °C?

Let's Learn

Complete the table.

Time (min)	0	10	20	30	40	50	60
Temperature (°C)	25	15	5	3	0	0	0

Draw a line graph to show how the temperature of the glass of water changes over time.



Did the temperature increase, decrease or remain the same?

Guided Practice

1 What was the temperature of the water in the glass at the start of the experiment?

2 By how much did the temperature drop after 20 minutes?

The first 20 minutes

By how much did the temperature drop in the next 20 minutes?

The next 20 minutes

3 What do you notice about the temperature after 40 minutes?

Temperature and time are quantities that can be expressed in fractions or decimals.

4 Can you estimate the temperature of the water in the glass after 25 minutes without having measured it?

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

**Worksheet 4**

**Drawing and Reading Line Graphs**

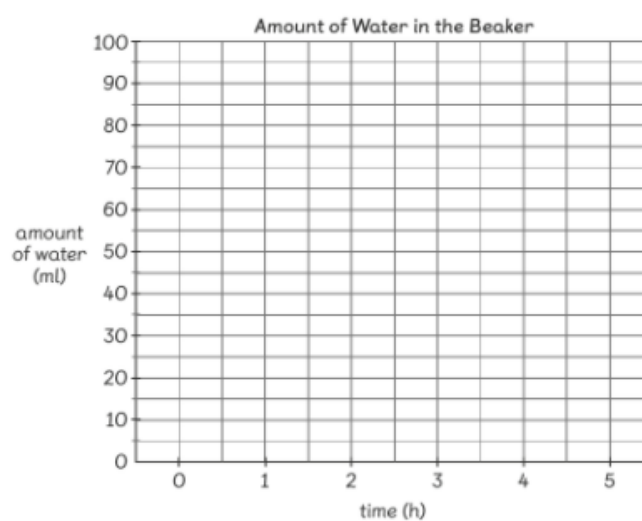
A beaker of water was left on the table to evaporate for 5 hours. The amount of water in the beaker was recorded every hour.



1 Complete the table to show the amount of water in the beaker after every hour.

Time (h)	0	1	2	3	4	5
Amount of water (ml)						

- 2 Draw a line graph to show the amount of water in the beaker over the 5-hour period.



- (a) How much water was in the beaker at first?
- (b) How much water was lost after 5 hours?
- (c) After how many hours did the beaker lose half the original amount of water?

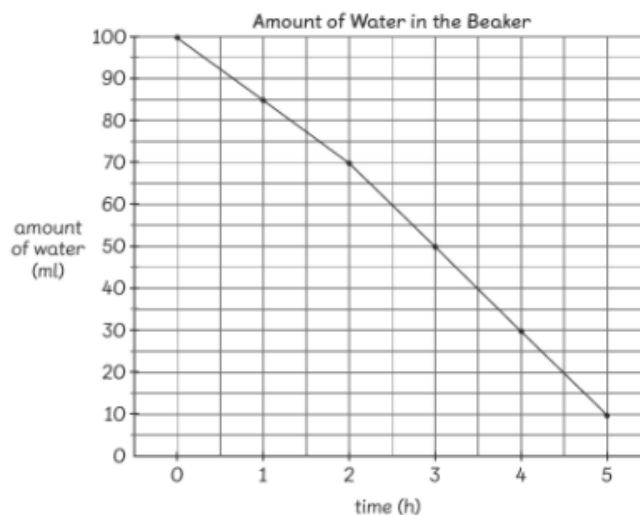
Graphs

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- 3 Another beaker of water was left to evaporate for 5 hours. The amount of water in the beaker was also recorded hourly.

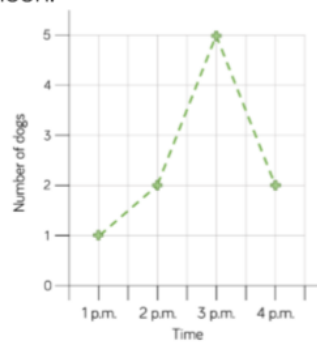
A line graph showing the amount of water in the beaker over the 5-hour period is drawn below.



- (a) How much water was left in the beaker after 5 hours?
- (b) How much water was lost after 5 hours?
- (c) Compare the water loss from this beaker with that from the beaker in Question 2.  
Which beaker lost more water over 5 hours?

## Challenge

Tommy created a line graph to show the number of dogs walking in the park one afternoon.



Tommy says,



At half past one  
there are 1.5 dogs  
in the park.

Why is Tommy incorrect?

What would be a better way of presenting this data?

Answers

Worksheet 4

Drawing and Reading Line Graphs

A beaker of water was left on the table to evaporate for 5 hours. The amount of water in the beaker was recorded every hour.

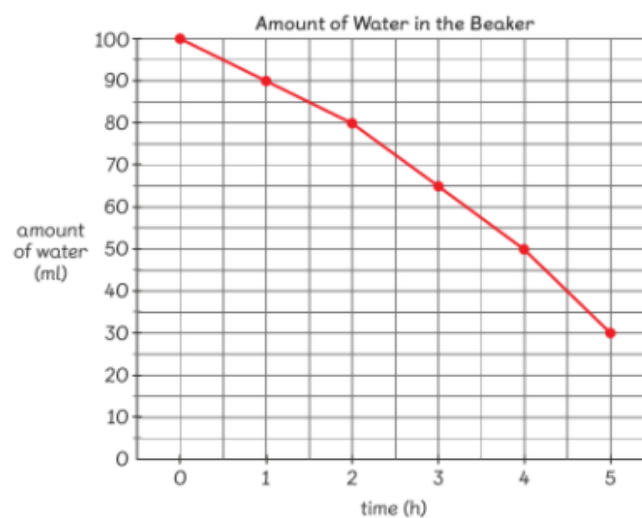


1 Complete the table to show the amount of water in the beaker after every hour.

Time (h)	0	1	2	3	4	5
Amount of water (ml)	100 ml	90 ml	80 ml	65 ml	50 ml	30 ml

## Answers

- 2 Draw a line graph to show the amount of water in the beaker over the 5-hour period.



- (a) How much water was in the beaker at first?
- (b) How much water was lost after 5 hours?
- (c) After how many hours did the beaker lose half the original amount of water?

100 ml

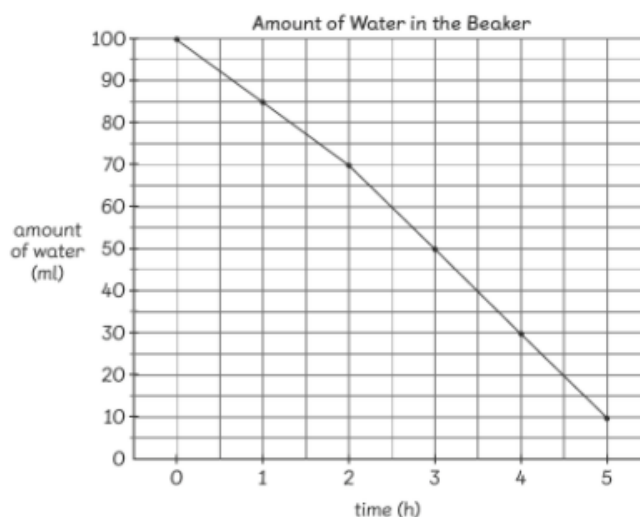
70 ml

4 hours

## Answers

- 3 Another beaker of water was left to evaporate for 5 hours. The amount of water in the beaker was also recorded hourly.

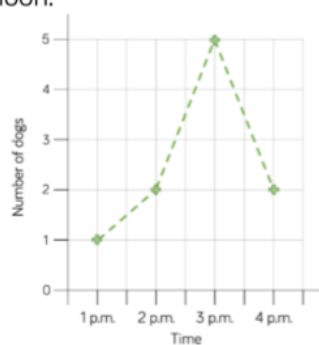
A line graph showing the amount of water in the beaker over the 5-hour period is drawn below.



- (a) How much water was left in the beaker after 5 hours? 10 ml
- (b) How much water was lost after 5 hours? 90 ml
- (c) Compare the water loss from this beaker with that from the beaker in Question 2.  
Which beaker lost more water over 5 hours? the second beaker

## Challenge Answers

Tommy created a line graph to show the number of dogs walking in the park one afternoon.



Tommy says,



At half past one there are 1.5 dogs in the park.

Why is Tommy incorrect?

What would be a better way of presenting this data?

Tommy is incorrect because you cannot have 1.5 dogs.

A better way of presenting this data would be using a bar chart, pictogram or table because the data is discrete.